NDFX	OF	STANDARD	DRAWINGS
	\cup	\mathcal{O}	DIVIVATINGS

HIGHWAY ITEMS

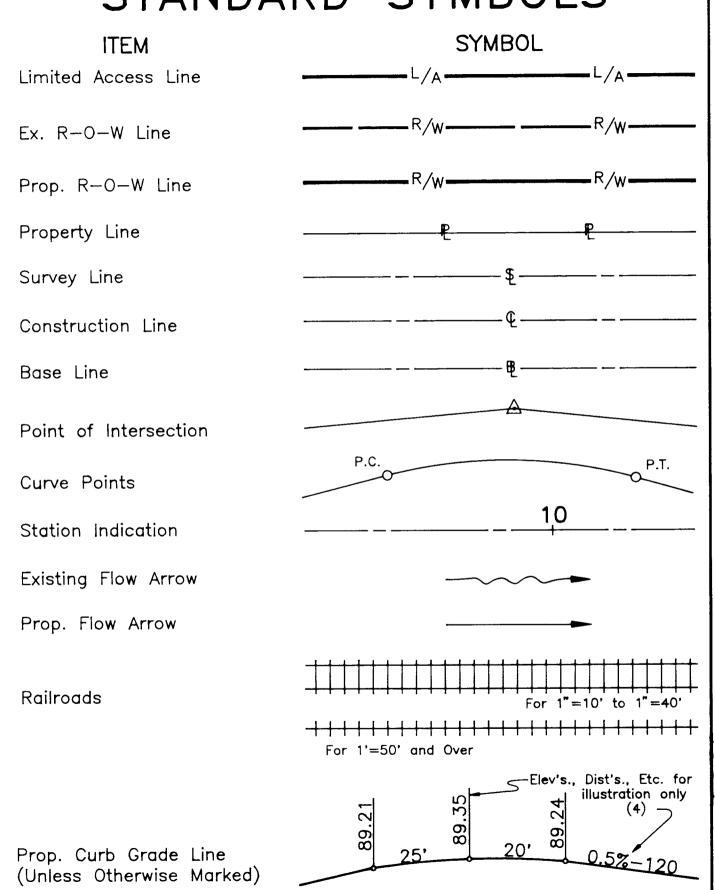
	THOTTVATAL							
PAG NO.	E TITLE OF DRAWING	PAGE NO.	TITLE OF DRAWING	PAGE NO.	TITLE OF DRAWING			
1. 2. 3. 4. 5.	Standard Symbols Standard Symbols Standard Symbols	33. 34. 35. 36.	WALLS Segmental Retaining Wall Modified Toe Wall Standard Railing Detail Inclinometer Installation Detail	65. 66. 67. 68.	LANDSCAPING Tree Wells Planting and Bracing Tree Planting (2 Stake Method) Tree Pruning			
6. 7. 8. 9.	CURBS - GUTTERS Curb, Type A-1, L-1 Curb, Type B-1, B-2, B-3 Curb, Type P-1, P-2, P-3 Curb, Type R-1, R-2, P-4 Curb, Type S-1, S-2, S-3	37. 38. 39. 40. 41.		69. 70. 71. 72. 73. 74.				
11. 12. 13. 14. 15.	Downspout Leader—conc. curb type B's. Downspout Leader—conc. curb type P's. Downspout Leader—conc. curb type R's.	42. 43. 44. 45. 46.	Precast Concrete Steps Cast in Place Concrete Steps Handrail	75. 76. 77.	STREET REHABILITATION DETAILS Concrete Curb Repair Full Depth Asphalt Repair in Concrete Pavement Partial Depth Asphalt Repair in Concrete			
16. 17. 18. 19. 20. 21. 22. 23.	Residential Driveway Construction Commercial Driveway Construction Driveway Reconstruction Replacing Integral Curb w/ Drop Curb at Driveways & Maximum Driveway Grades Modified Commercial Driveway Const.	47. 48. 49. 50. t 51. 52. 53. 54. 55. 56.	MISCELLANEOUS Stakes Standard Traffic Island & Pier Protection Detail Handicap Ramp Details Bicycle Rack — Type A	78. 79. 80. 81. 82. 83. 84. 85.	Pavement Partial Depth Asphalt Repair in Asphalt Pavement Adjusting Manholes Concrete Pavement — Full Depth Repair			
24. 25. 26. 27. 28. 29. 30. 31. 32.	PAVEMENT Roadway Sections for Concrete Pavement Roadway Sections for Asphalt Pavement Joint Layout for Intersections Standard Restoration of Openings Standard Restoration of Openings				STORM SEWER ITEMS See sheet nos. 100 — 143			

MAY 1995

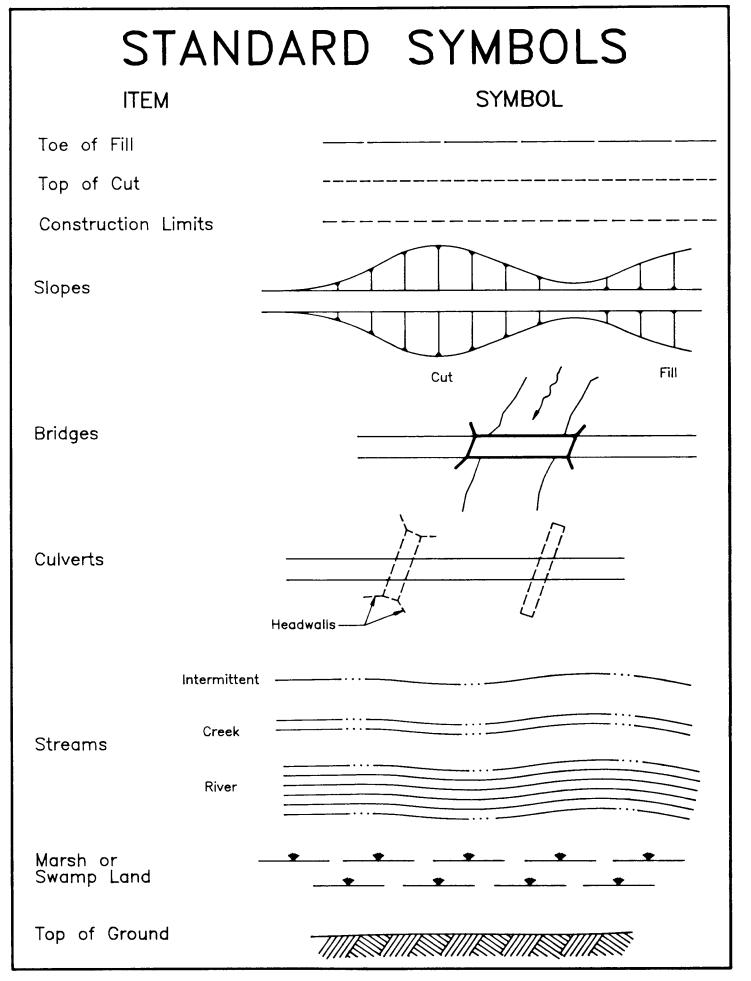
STANDARD SYMBOLS

ITEM	SYMBOL				
State Line	(Indiana) (Ohio)				
County Line		(Hamilton County) (Butler County)			
Township Line	(Miami Township) (Green Township)				
Corporation Line		Cincinnati) , Amberley Village, Etc.)			
Section Line	(Section 25) (Section 24)				
Prop. Fence Line	X	Prop Fence			
Ex. Fence Line	x >	Ex Fence			
Ex. Center Line					
Prop. Center Line					
Existing Curb Line (2007) Proposed Curb Line (2007) Future Curb Line					
Proposed Curb Line ぬるー Future Curb Line					
Existing Conc. Wall					
Existing Stone Wall	(Width	Drawn To Scale)			
Existing Brick Wall	-(width	blum 10 scale)			
Proposed Wall					
Edge of Conc. Walk, Aspl Covered Conc. Pav't., Bri & Granite Pav't.					
Edge of Macadam, Gravel, & Crushed Stone Pav't					

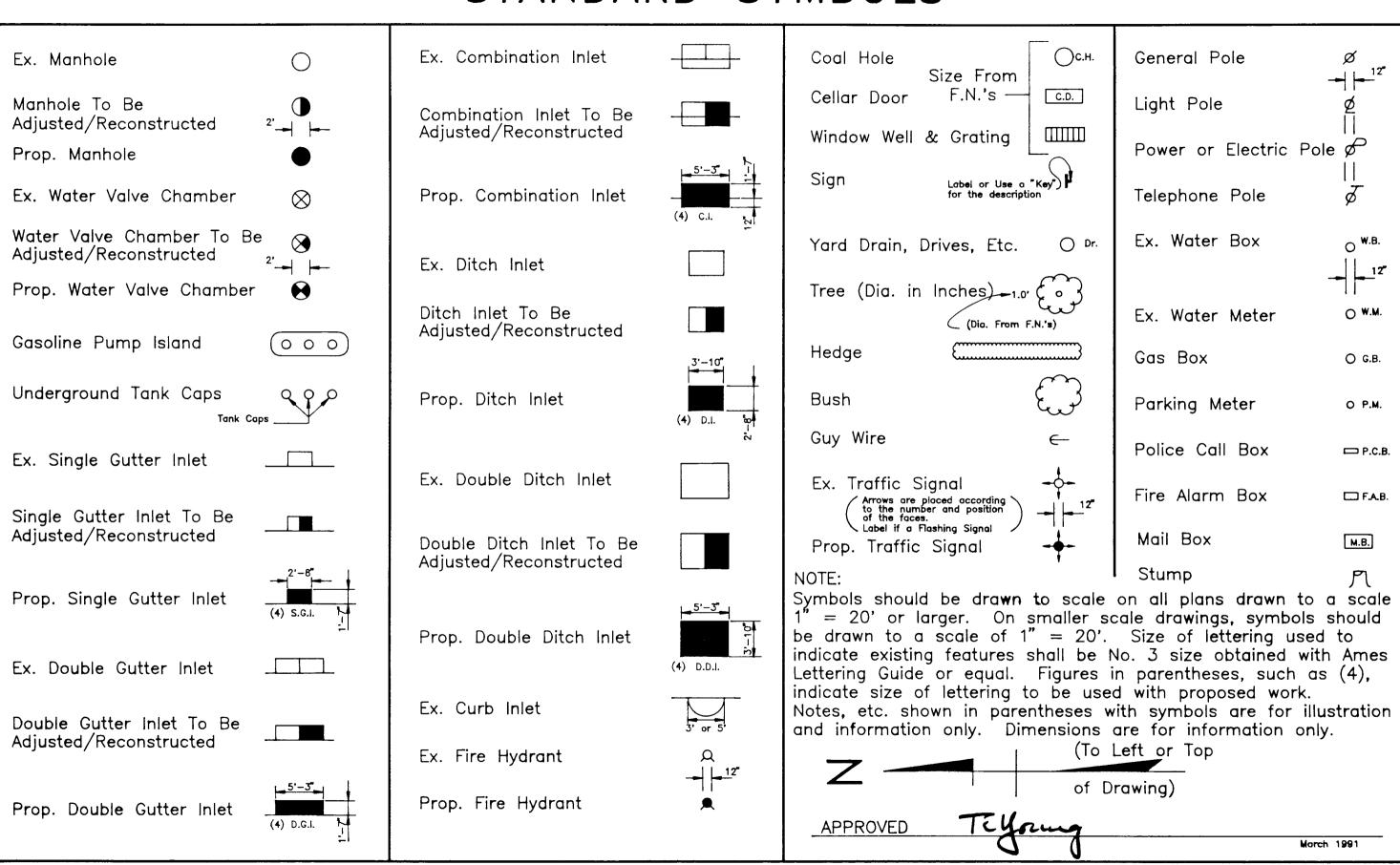
STANDARD SYMBOLS

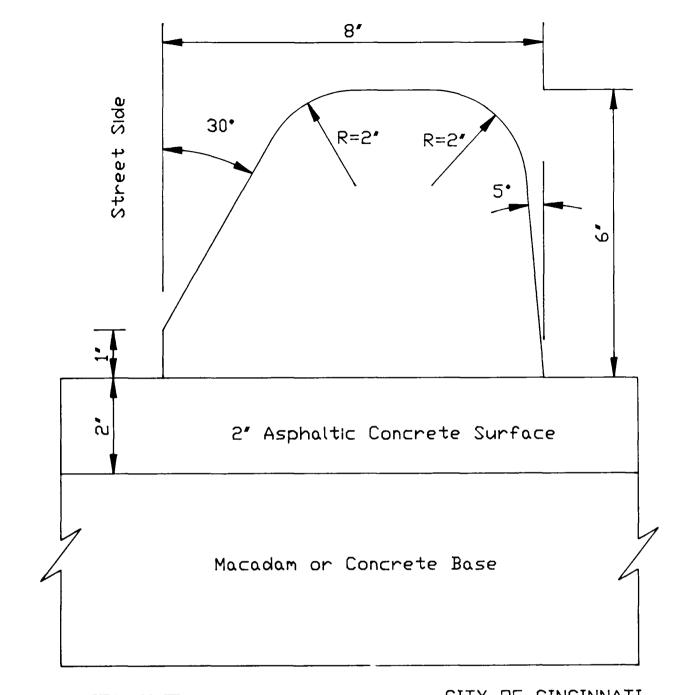


STANDARD SYMBOLS ITEM SYMBOL Profile of Property Line Closest to Bottom of Plan Profile of Centerline of Street-Profile of Property Line Closest to Top of Plan (Indicates Direction of Flow) Ex. Sewer & Manholes (12" & Over to Scale) Prop. Conduit Prop. Conduit & Manhole Water Line Label Size, Type, Gas Line Direction of Flow (if applicable), and if line is existing or proposed. — T — Telephone Line Electric Line House Connection Existing Guard Rail Prop. Guard Rail Dumped Rock Buildings House No.s. etc.. #2113_ for illustration 2 St. Frame Only D.S. = 62.52--- (Porch)



STANDARD SYMBOLS





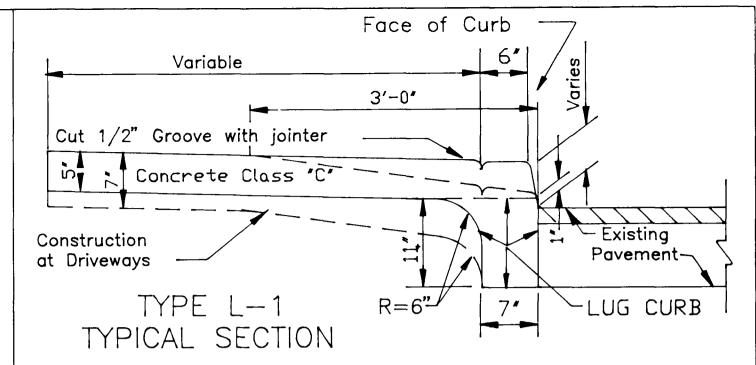
TYPE A-1

Area of Curb Section - 28 sq. in. Yield - 72 +/- per portion of Asphaltic Concrete. Quantity - 0.194 cu. ft. per linear foot CITY OF CINCINNATI
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING $\triangle \triangleleft \square \square \square \square$

CONCRETE CURB
SCALE: 1/2"=1" FEBRUARY, 1991

APPROVED: TEllowing CITO ENGINEER

ACC, ND, 21429



NOTE: Use 2.0% cross slope on walk and 6" gutter depth unless grade details are furnished or local conditions require otherwise.

Concrete used and method of finishing and curing shall conform to that specified for Item 608—Conc. Walk and Steps current Ohio State Spec's.

Payment for Concrete Walks constructed integral with Lug Type Concrete Curbs will be based on measure—ment from back of walk to face of curb and considered uniformly 5" thick.

Payment for Lug Type Concrete Curbs at the price bid per linear foot shall cover the necessary excavation and furnishing and placing the concrete for the "Lug", which shall be considered to be all of the concrete below a plane passing through the bottom of the walk and intersecting the face of curb.

CITY OF CINCINNATI
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING

All Radii are 1" unless otherwise noted

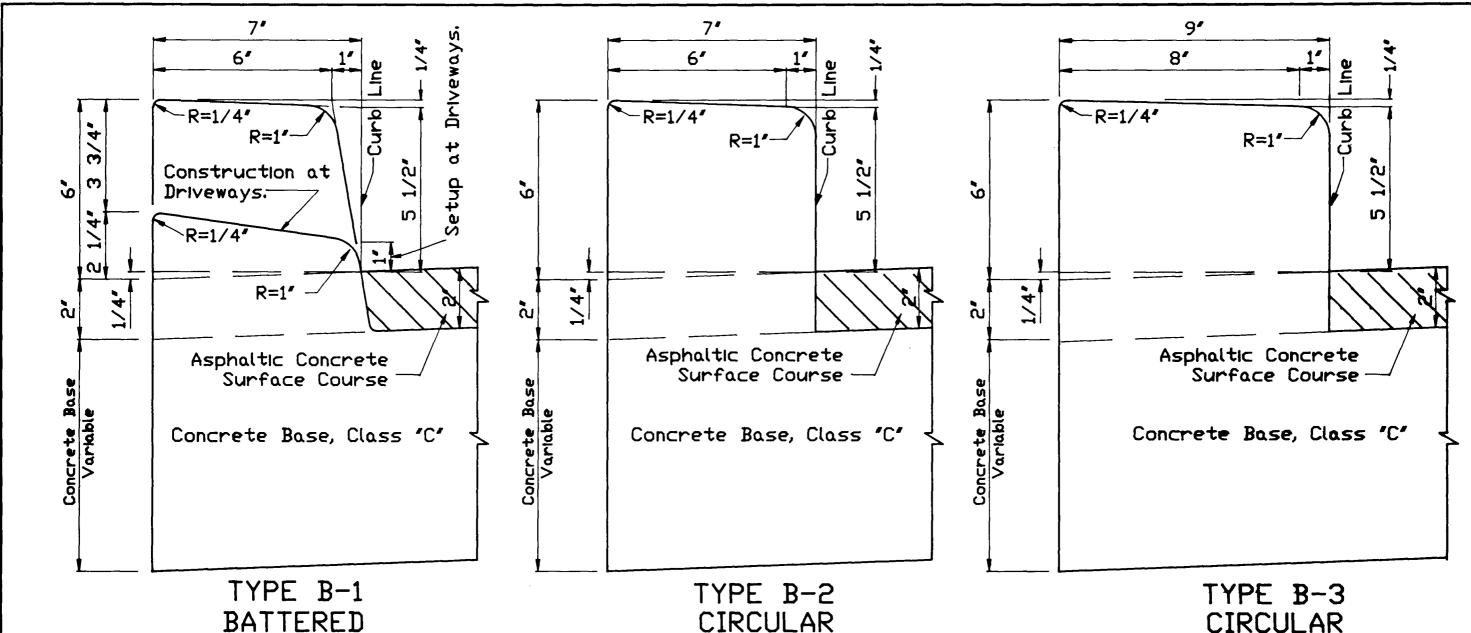
STANDARD LUG CONCRETE CURB

INTEGRAL WITH CONCRETE WALK SCALE : NONE May , 1995

Approved: CITY ENGINEER

<u> ACC. NO. 21430</u>

PAGE 006



NOTE

After the Standard Concrete Curb Integral with Concrete Base, has been constructed, a minimum time period of two weeks must elapse before the Asphaltic Concrete Surface Course is placed on the Concrete Base.

NOTE

The Construction of Type B-2 and B-3 Curb shall apply only to radii less than one hundred (100) feet and shall not be used on larger radii curves.

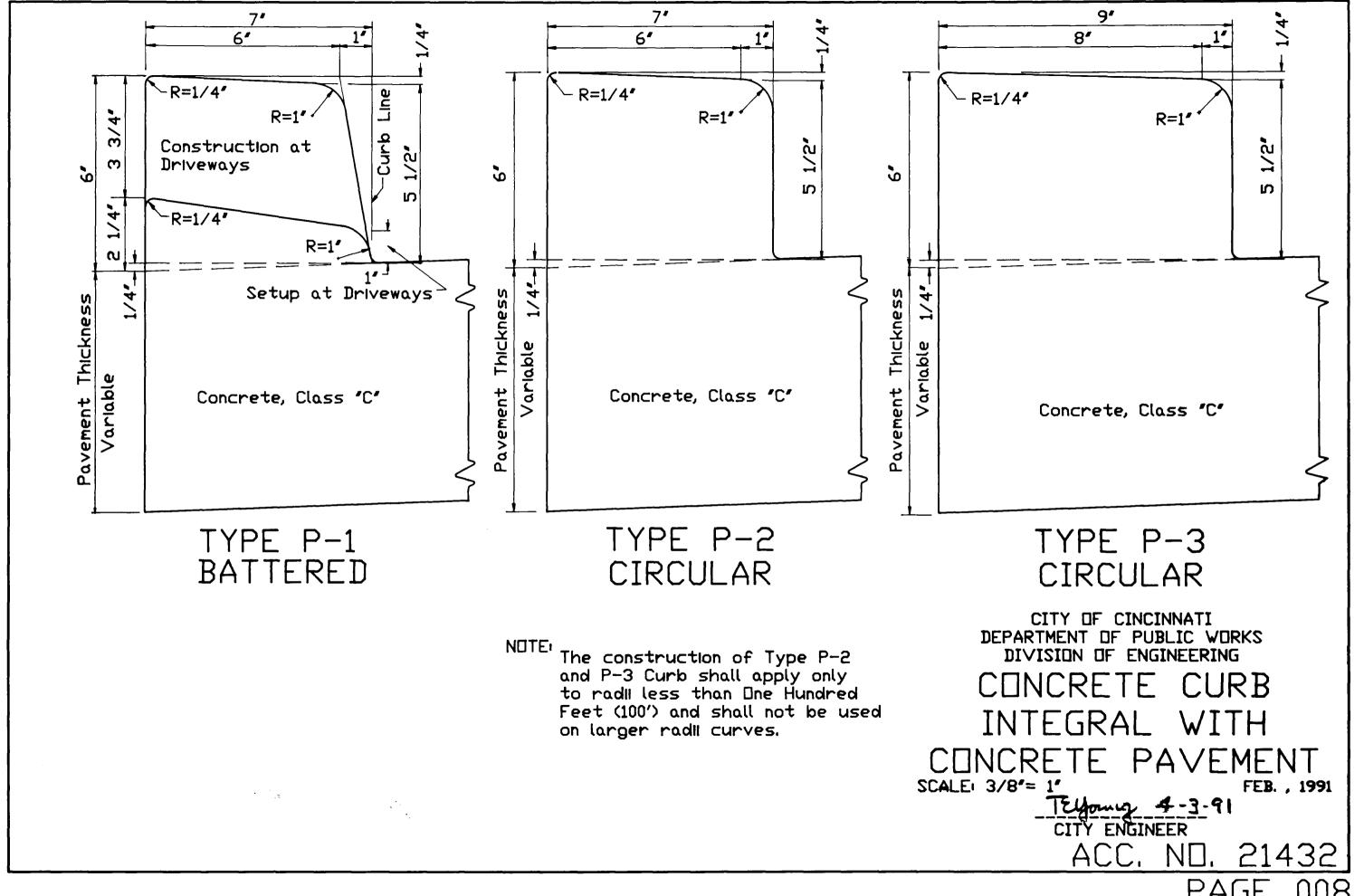
CIRCULAR

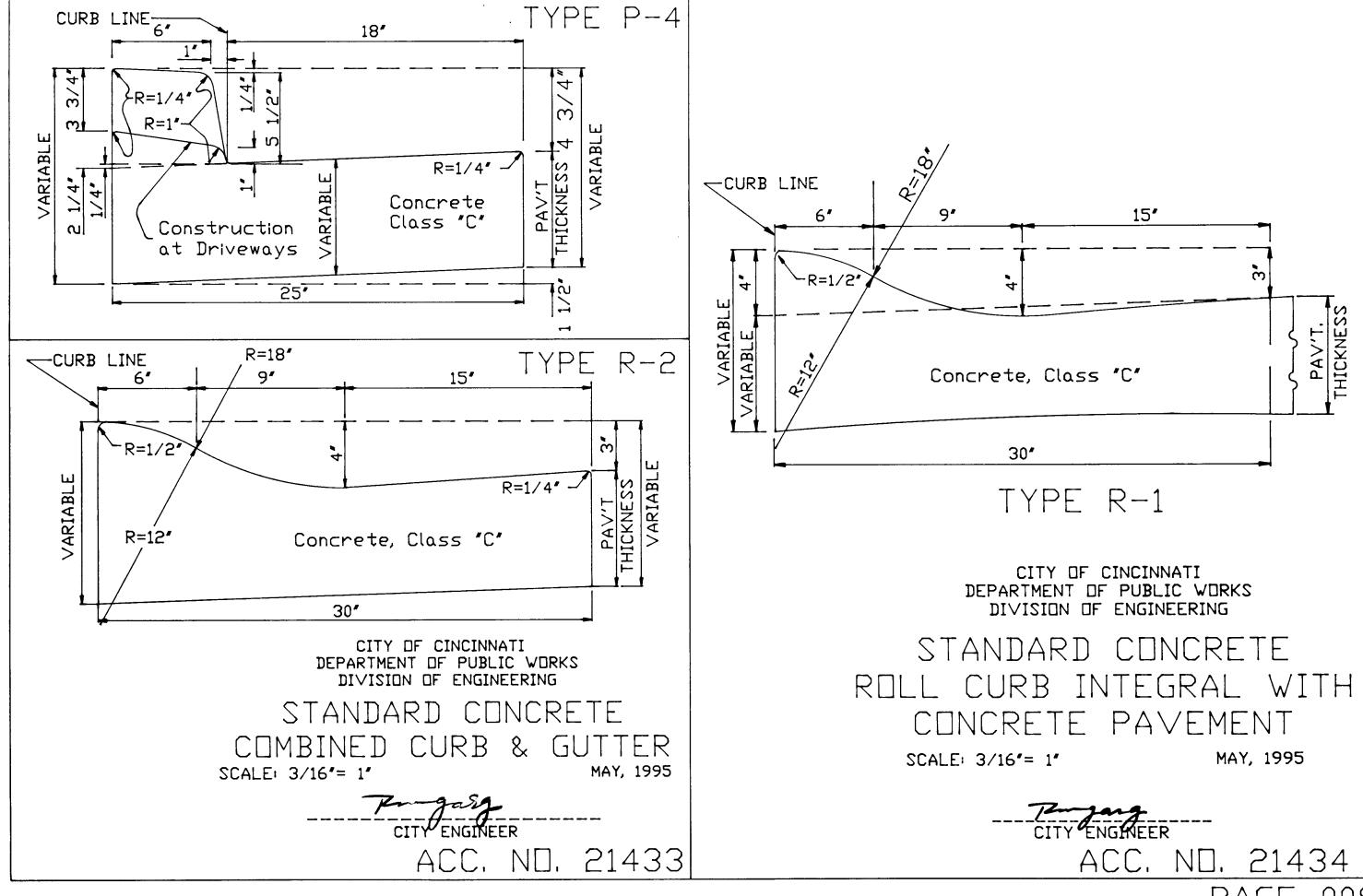
CITY OF CINCINNATI DEPARTMENT OF PUBLIC WORKS DIVISION OF ENGINEERING

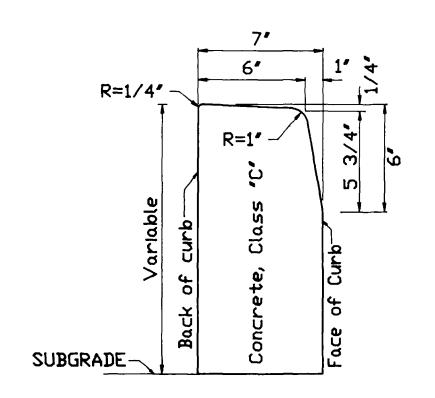
CONCRETE CURBS INTEGRAL CONCRETE

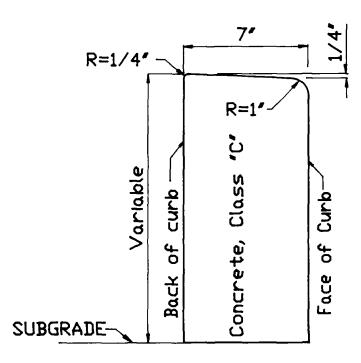
SCALE: 5/16"= 1" FEBRUARY, 1991

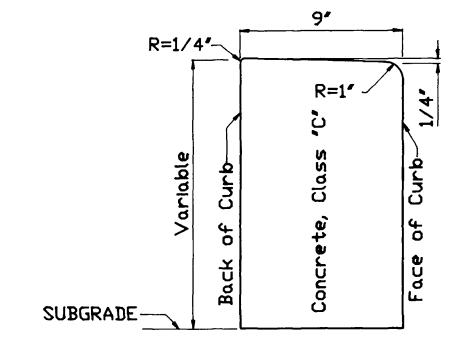
> Telforms 4-3-91 CITY ENGINEER NO. 21431



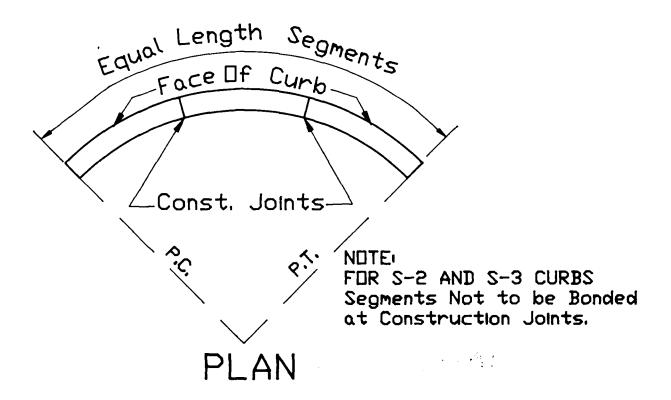








BATTERED TYPE S-1 CIRCULAR TYPE S-2 CIRCULAR TYPE S-3



CITY OF CINCINNATI
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING

STANDARD SEPARATE CONCRETE CURBS

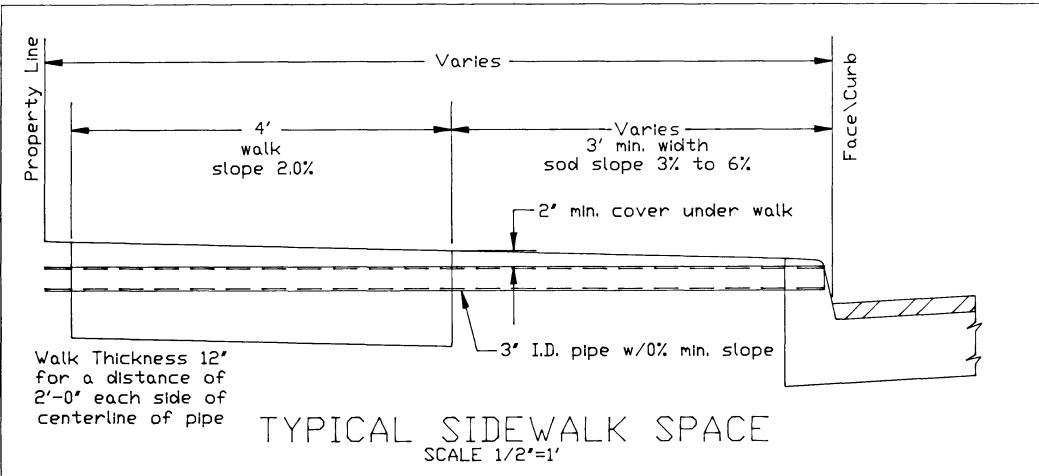
SCALE: 3/16'= 1"

FEBRUARY, 1991

APPROVED: TENJOHNA 4-3-91
CITY ENGINEER

ACC. NO. 21435

PAGE 010

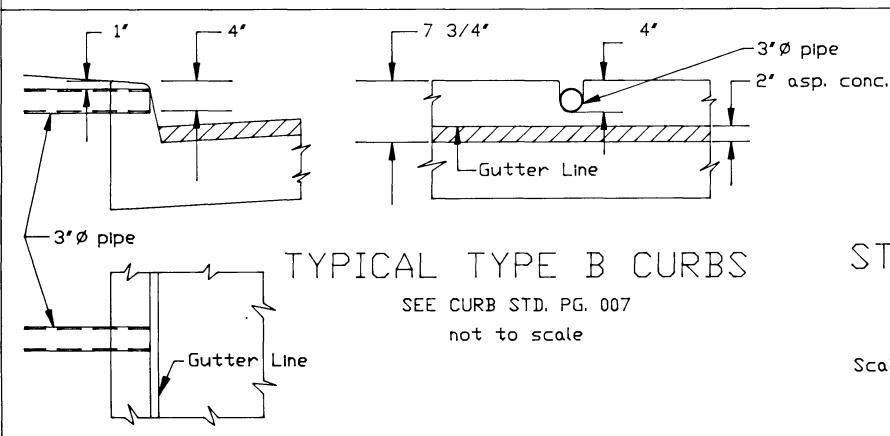


Note Downspout leader can be installed at time of construction with a 4" slot in curb.

After curb has been constructed, slot must be sawed.

Conduit material shall be either cast iron or PVC.

Downspout Leader is to drain only Downspouts, and shall not be connected to any underground water source.

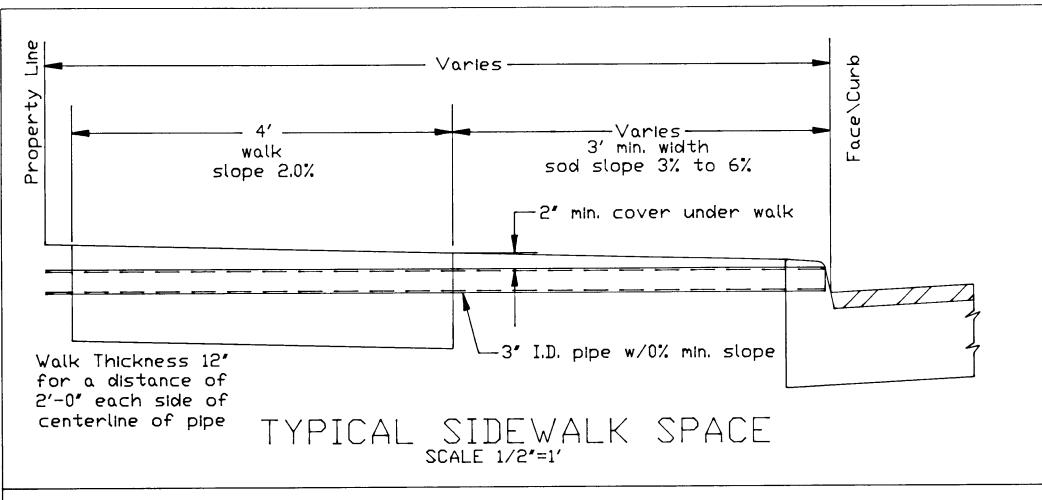


CITY OF CINCINNATI
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING

STANDARD DOWNSPOUT LEADER
OUTLETS FOR STANDARD
CONCRETE CURB TYPE B'S
Scale as noted MAY,1995

CITY ENGINEER

ACC. NO. 20622

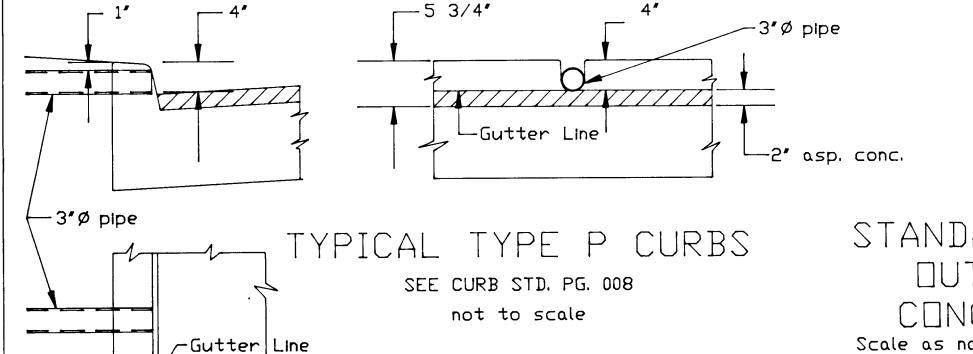


NOTE Downspout leader can be installed at time of construction with a 4" slot in curb.

After curb has been constructed, slot must be sawed.

Conduit material shall be either cast iron or PVC.

Downspout Leader is to drain only Downspouts, and shall not be connected to any underground water source.

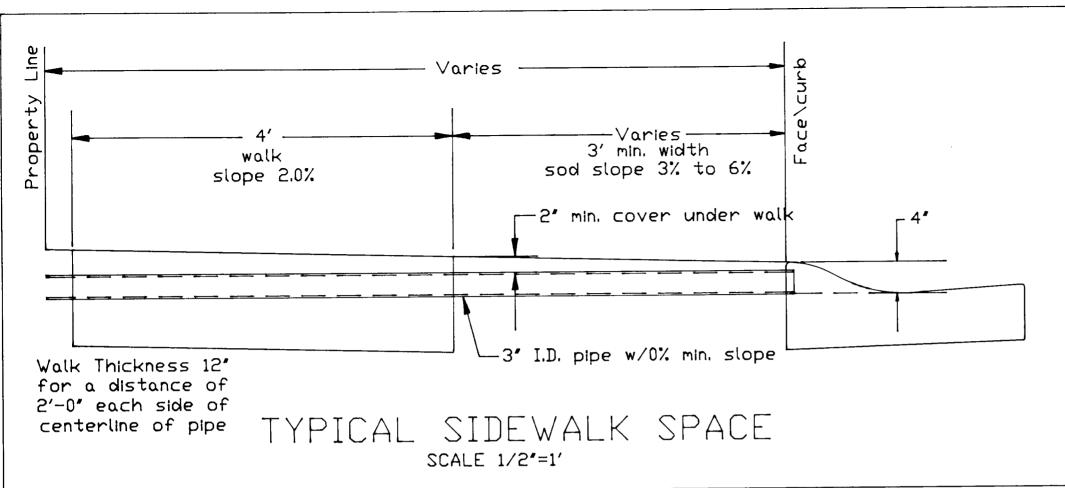


CITY OF CINCINNATI
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING

STANDARD DOWNSPOUT LEADER
OUTLETS FOR STANDARD
CONCRETE CURB TYPE P'S
Scale as noted
MAY ,1995

CITY ENGINEER

ACC, ND, 20622

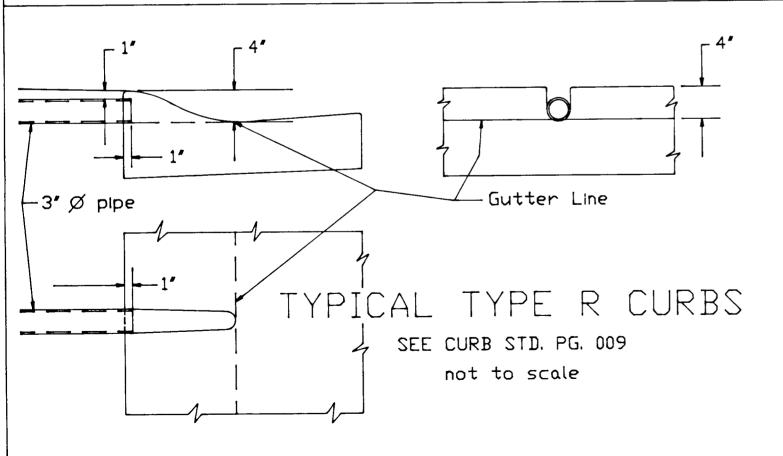


NDTE Downspout leader can be installed at time of construction with a 4" slot in curb.

After curb has been constructed, slot must be sawed.

Conduit material shall be either cast iron or PVC.

Downspout Leader is to drain only Downspouts, and shall not be connected to any underground water source.

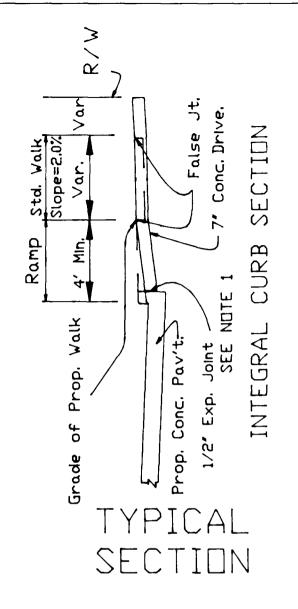


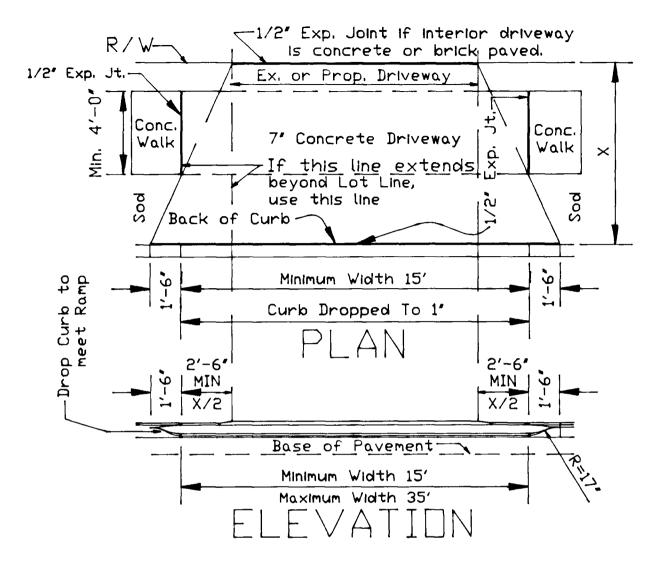
CITY OF CINCINNATI
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING

STANDARD DOWNSPOUT LEADER
OUTLETS FOR STANDARD
CONCRETE CURB TYPE R'S
Scale as noted
MAY ,1995

CITY ENGINEER

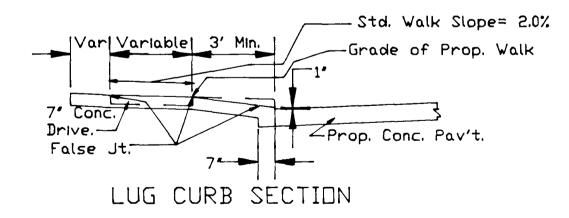
ACC. NO. 20622





NOTE:

- ① For Additional Driveway
 Drop Curb Details, See Standard
 Drawings for Type L-1, B-1, P-1,
 P-4 and R-2 Concrete Curbs.
- ② Conc. Walk shall be removed to the nearest joint outside of the Proposed driveway. Install 1/2 inch Exp. joint against undisturbed concrete walk.
- 3 Dimensions may be modified to accommodate existing conditions at locations approved by, and to the satisfaction of, the City Engineer.



CITY OF CINCINNATI
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
STANDARD RESIDENTIAL
DRIVEWAY CONSTRUCTION

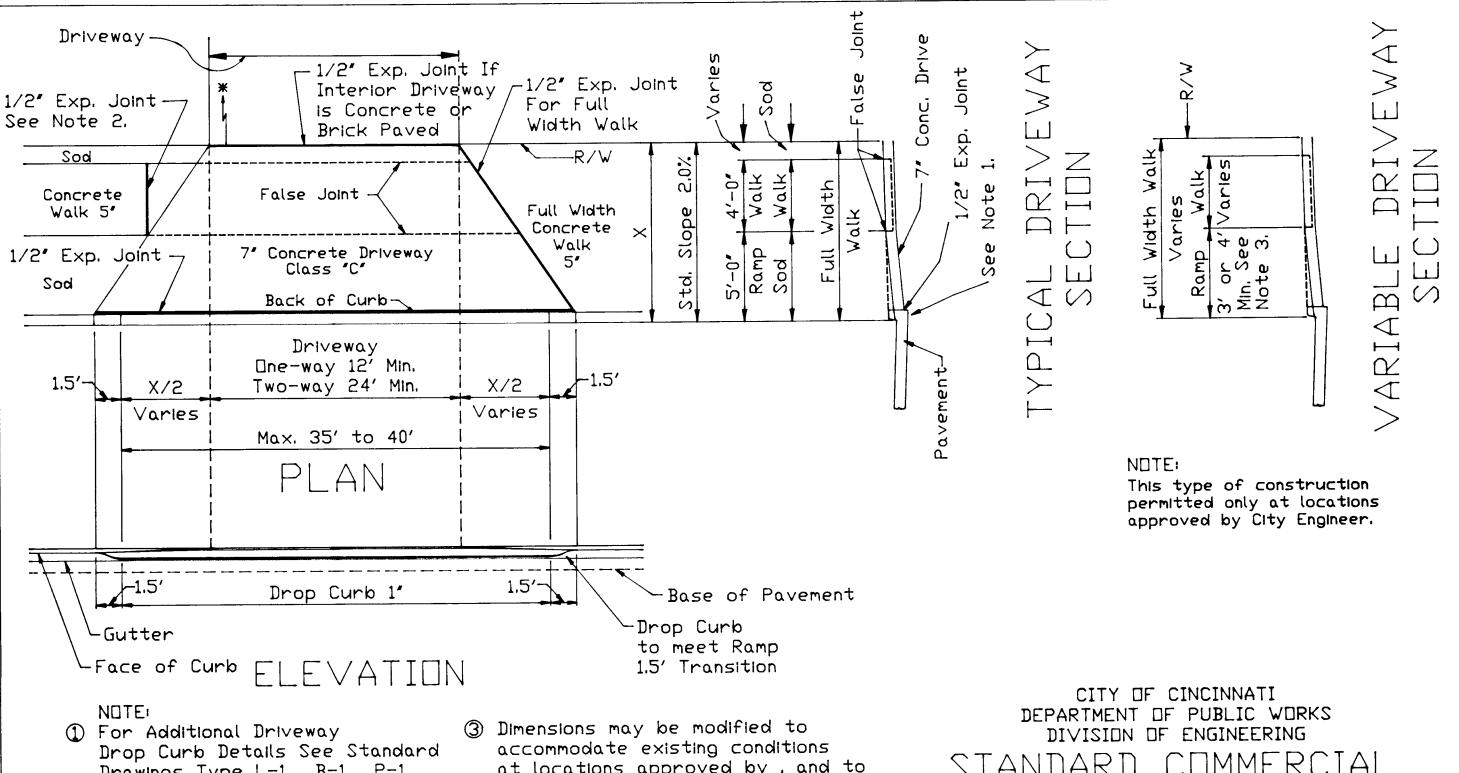
SCALE: NONE

MAY , 1995

Note:
This type of construction permitted only at locations approved by City Engineer.

CITY ENGINEER
ACC. NO.

21436



Drawings Type L-1, B-1, P-1, P-4 and R-2 Concrete Curbs.

2 Conc. Walk shall be removed to the nearest joint outside of the Proposed driveway. Install 1/2 inch Exp. joint against undisturbed concrete walk.

at locations approved by , and to the satisfaction of , the City Engineer .

*To be paved 25' behind Property line, as per CMC 721-134.

STANDARD

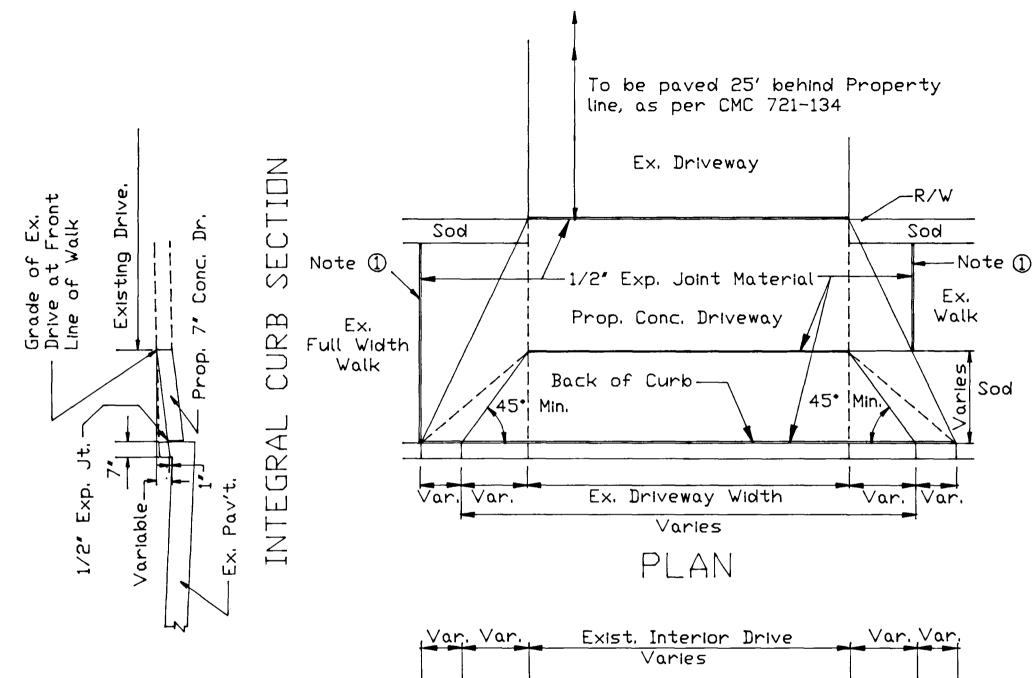
SCALE: NONE

MAY., 1995

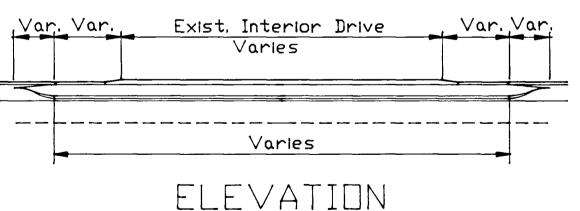
CITY ENGINEER $N\square$.

PAGE

21516



- NOTE
- ① Conc. Walk to be removed to the nearest joint outside of the Proposed driveway. Install 1/2 inch Exp. joint against undisturbed concrete walk.
- Requirements may be modified to accommodate existing conditions at locations approved by the City Engineer.



③ For Additional Driveway Drop Curb Details See L-1, B-1, P-1, P-4 and R-2. CITY OF CINCINNATI
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING

STANDARD

DRIVEWAY

RECONSTRUCTION

SCALE : 3/16'= 1'-0' May , 1995

D.

Drive.

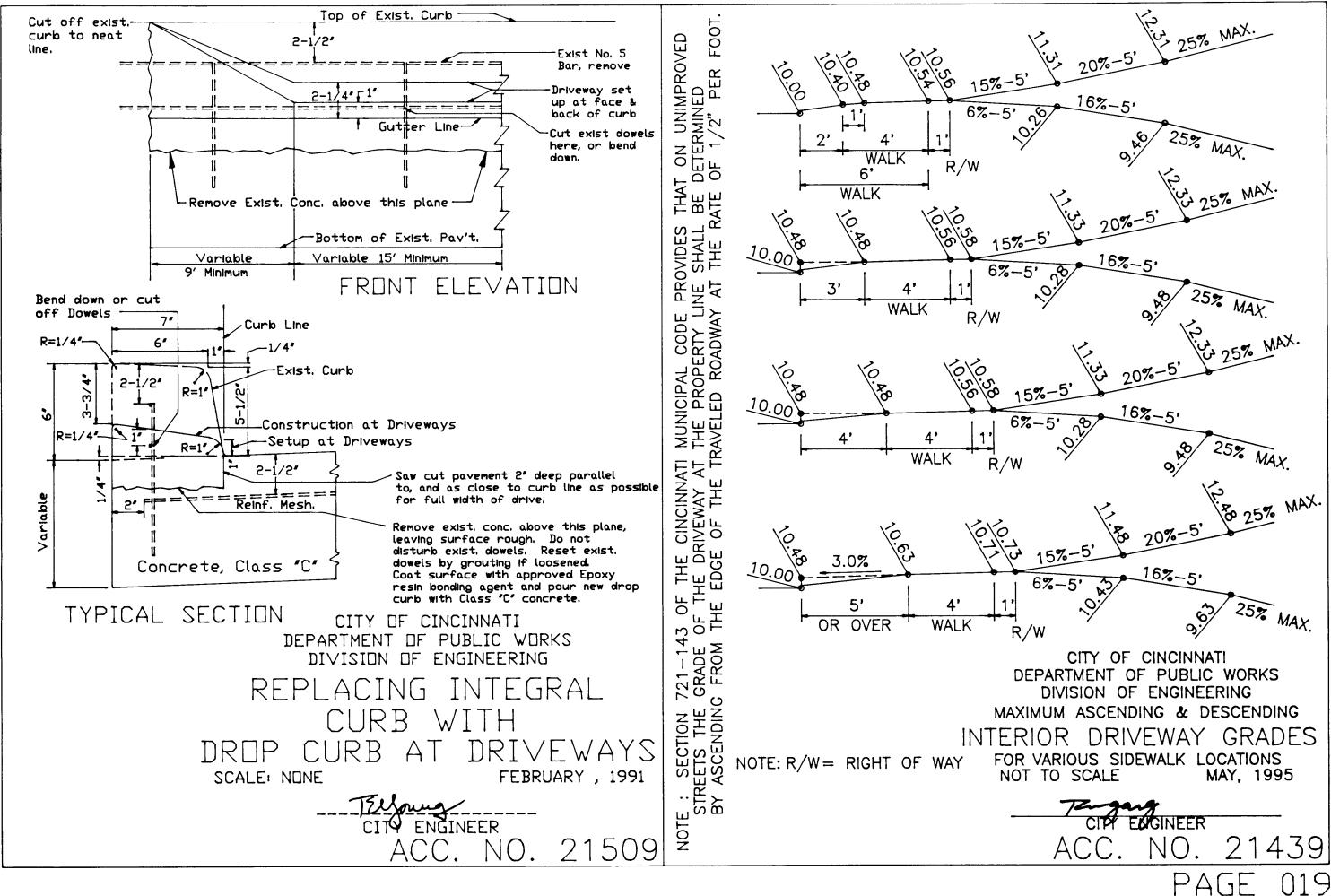
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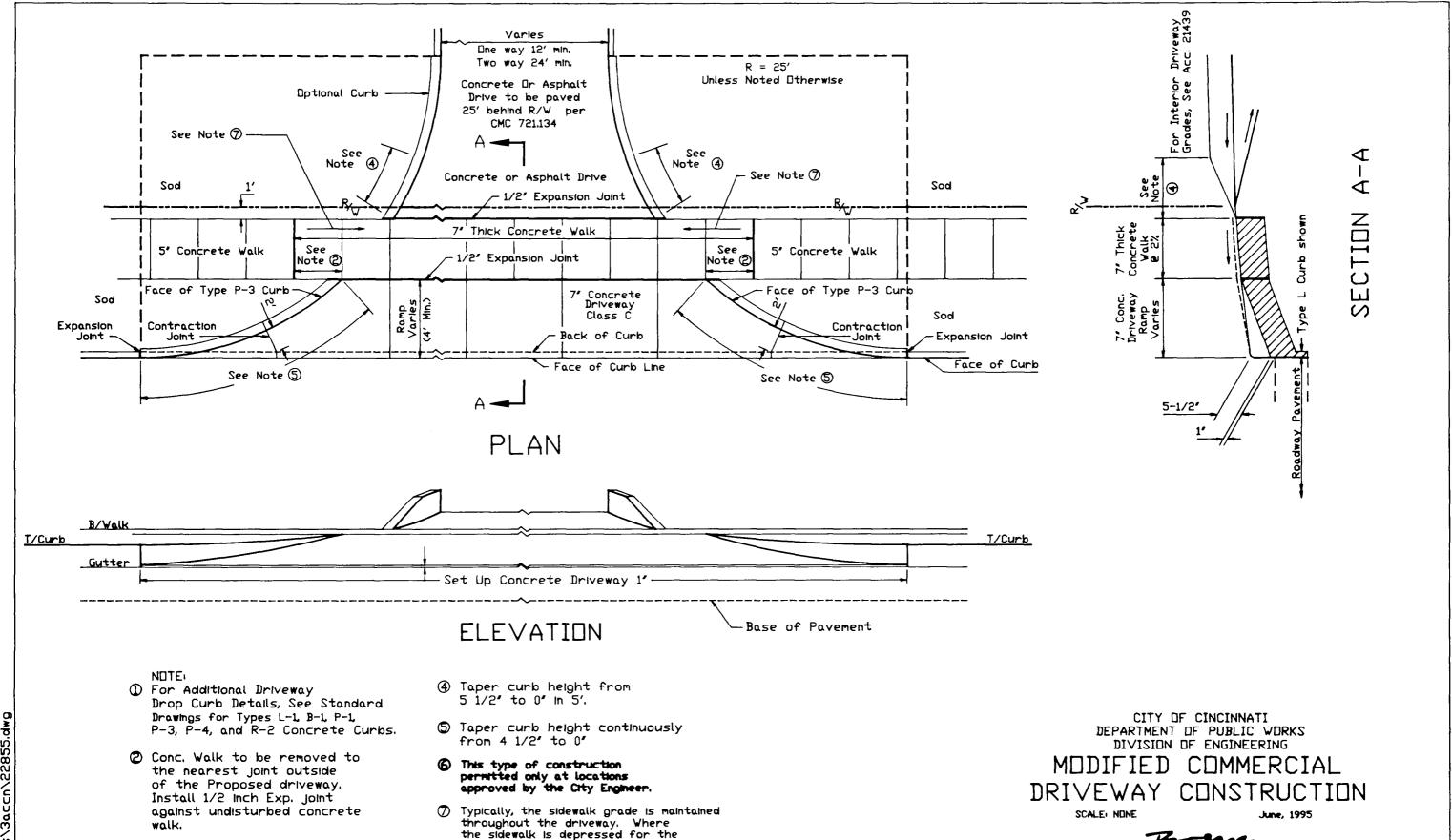
False

Variable

CITY ENGINEER ACC. NO. 21508

UG CURB





driveway ramp, the sidewalk shall

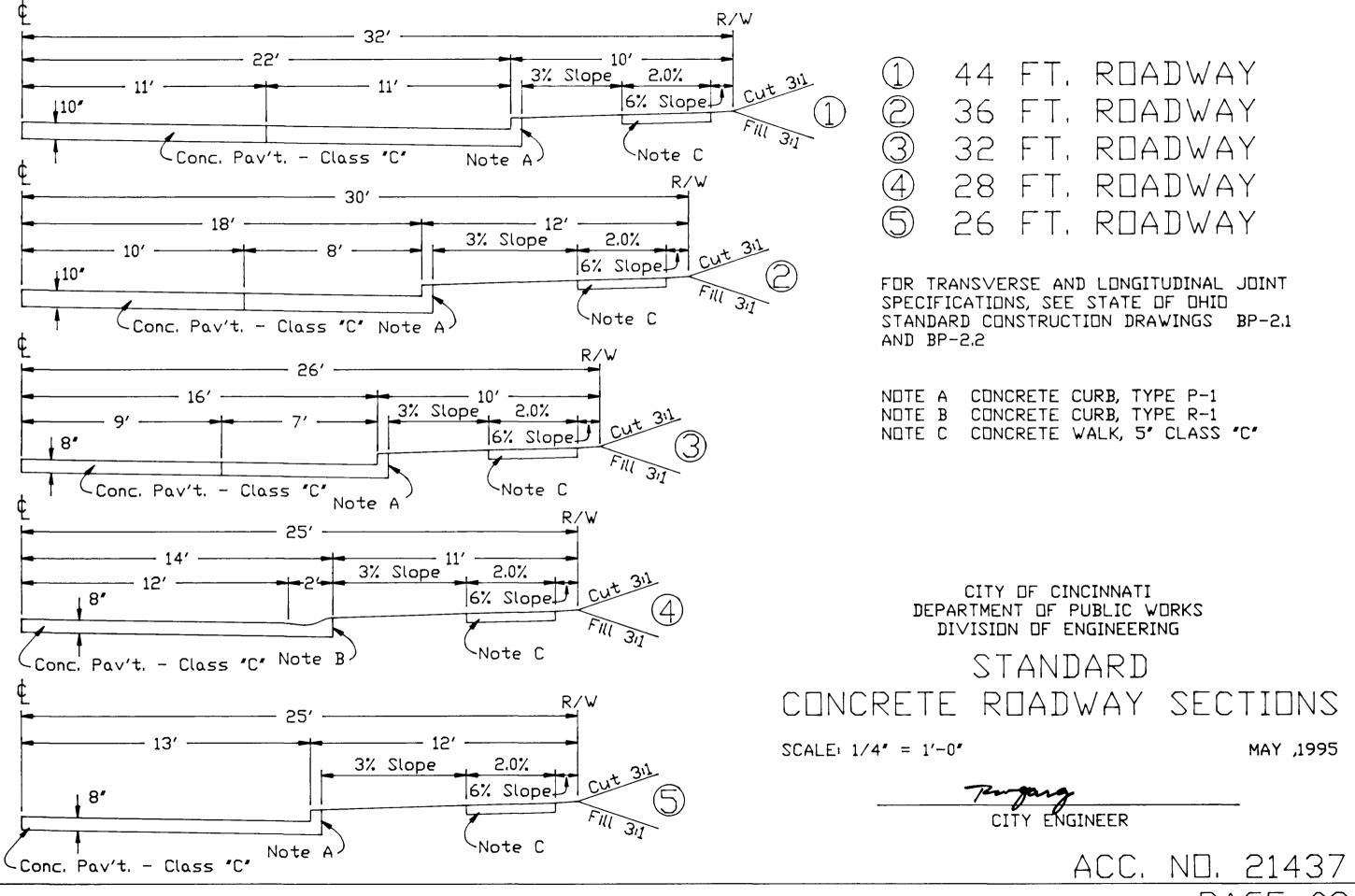
be sloped down at 1/4" per foot (max).

3 Requirements may be modified

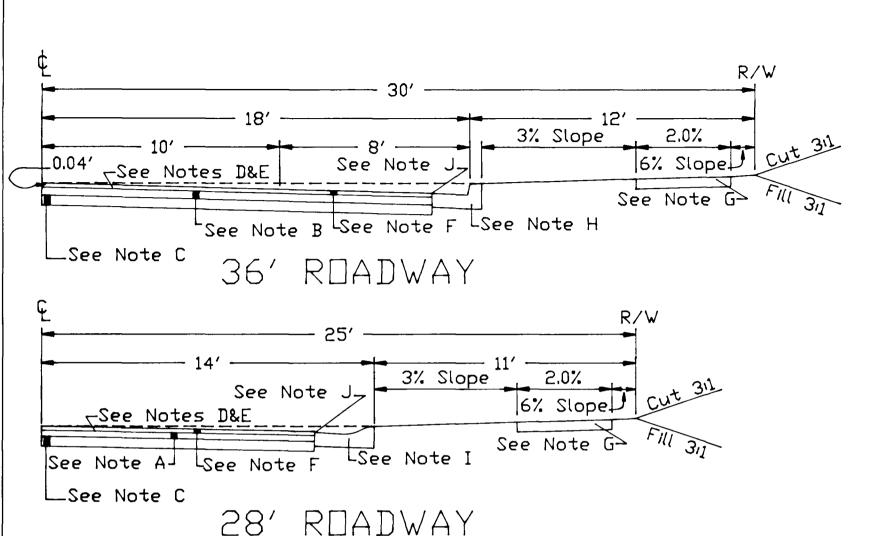
City Engineer.

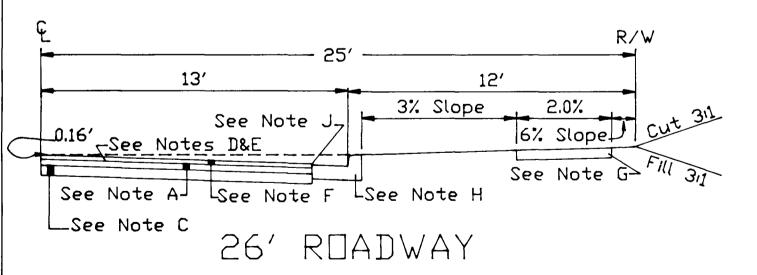
to accommodate existing conditions at locations approved by the

ACC. ND. 22855



PAGE 024





Design for California Bearing Ratio 5.0 Minimum Design

NOTE A - 3" 301 Base Course NOTE B - 5" 301 Base Course NOTE C - 5" 301 Base Course NOTE D - Base to be sealed with .3

Gal, per sq. yd. of R.C. 250 and a 12 lb. per sq. yd. sand cover is provided.

NOTE E - 407 Bituminous Tack Coat.* NOTE F - 2" 404 Wearing Course.*

NDTE G - 5" One course conc. walk-

class "C"

NOTE H - Conc. combined curb and gutter- See Acc. No. 21433 Type P-4

NOTE I - Conc. combined curb and gutter - See Acc. No. 21433 Type R-2

NDTE J - Surface of 404, 1/2" above Gutter Plate

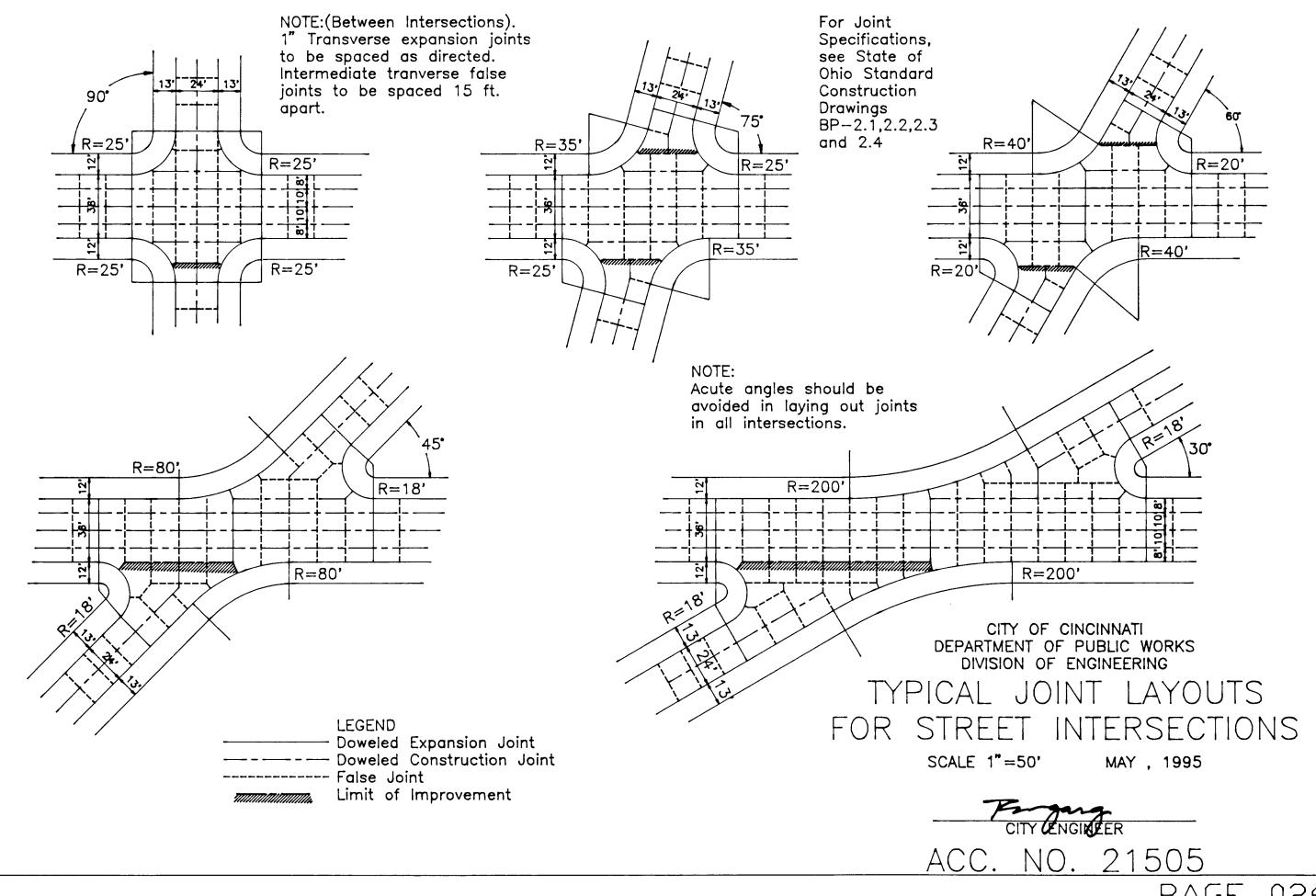
* Do not apply for nine months after the 301 base course on all subdivision streets and where all other circumstances permit.

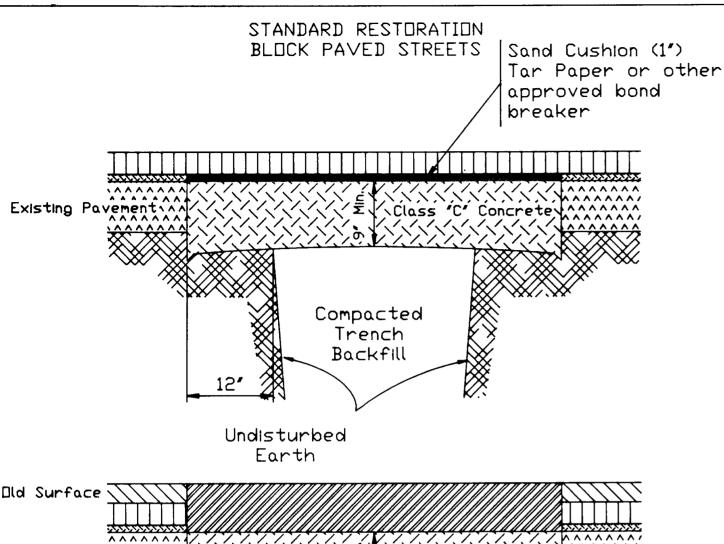
CITY OF CINCINNATI DEPARTMENT OF PUBLIC WORKS DIVISION OF ENGINEERING ASPHAL T ROADWAY SECTIONS

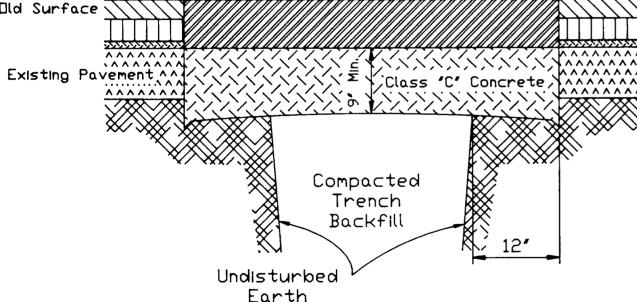
SCALE: NONE

MAY ,1995

NO. 21510 ACC.







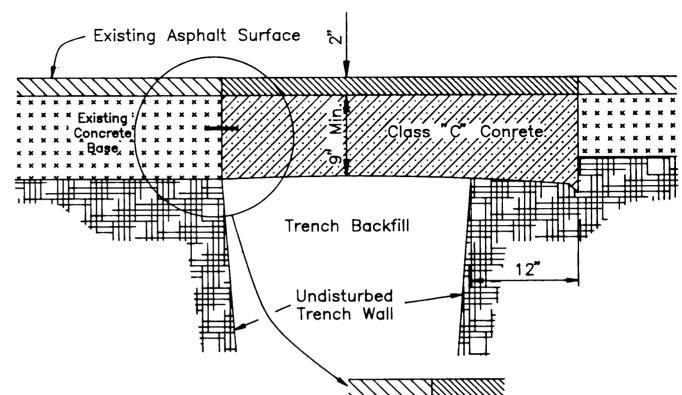
2 inches of 404 asphalt shall be compacted with 3 to 5 ton roller, 8 to 10 ton or equivalent vibratory compactor for longitudinal cuts.

Concrete shall be consolidated with internal type vibrator.

Bond breaker shall be sand cushion (1"), tar paper or approved medium.

Edges of restoration shall be sealed with asphalt cement meeting the requirements of Item 702.1 of the Dhio Department of Transportation Construction and Materials Specifications.

STANDARD RESTORATION ASPHALT SURFACE ON CONCRETE BASE



Existing pavement shall be removed a minimum of 12 inches beyond the trench restoration.

In lieu of the 12 inch cutback, one of the following methods may be used:

- A) Installation of dowel bars as shown on detail this drawing.
- B) Backfill with Controled Low Strength Material (CLSM)

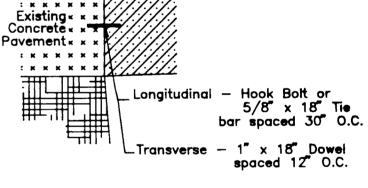
Concrete shall be consolidated with internal type vibrator.

2 inches of Item 404 asphalt shall be compacted with 3 to 5 ton roller, 8 to 10 ton or equivalent vibratory compactor for longitudinal cuts.

Class "FS" concrete may be used when the pavement is required to be open to traffic the same day.

Item 702.01 — Edges of restoration shall be sealed with asphalt cement.

The seal shall be a uniform 3 inch wide asphalt cement seal.



CITY OF CINCINNATI
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAY ENGINEERING

STANDARD RESTORATION OF OPENINGS

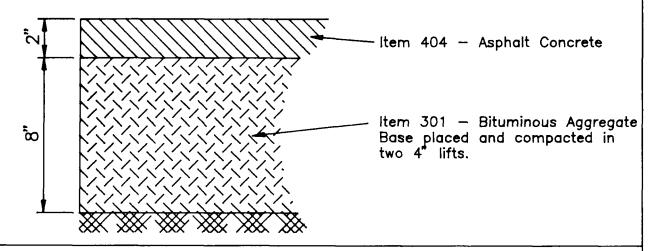
SCALE: NONE

MAY, 1995



ACC. NO. 21506

STANDARD RESTORATION BITUMINOUS AGGREGATE BASE



STANDARD RESTORATION ASPHALT PAVEMENT ON STONE BASE

- 1. Item 404 Asphalt Concrete compacted with 3 to 5 ton roller, 8 to 10 ton for longitudinal cut or equivalent vibratory compactor.
- 2. Item 304 Aggregate Base.
- 3. Before placing the aggregate, a layer of dry screenings shall be placed on the compacted subgrade to a minimum depth of one (1) inch as an inverted choke. This shall not be rolled or compacted in any manner. The course aggregate shall then be placed in two courses, each course to be five (5) inches in depth and to be individually rolled, choked and re-rolled to thoroughly key the aggregate.

The choke material shall consist of No. 87 screenings, crushed stone or slag.

4. Edges of restoration to be sealed with Item 702.01.

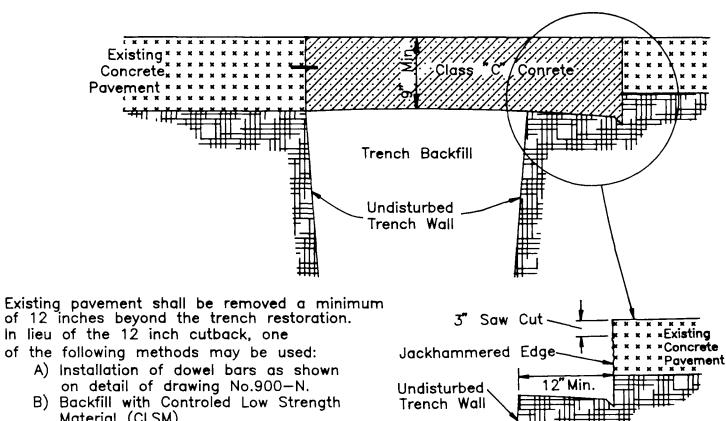
Inverted Choke

Minimum Depth 12

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Subgrade to be backfilled in accordance with Department of Public Works Regulations governing street openings.

STANDARD RESTORATION CONCRETE PAVEMENT



CITY OF CINCINNATI DEPARTMENT OF PUBLIC WORKS

Saw Cut Edge Detail

DIVISION OF HIGHWAY ENGINEERING

STANDARD RESTORATION OF OPENINGS

> SCALE: NONE MAY. 1995



ACC. NO. 21507

A) Installation of dowel bars as shown on detail of drawing No.900-N. B) Backfill with Controled Low Strength

Material (CLSM)

Square edge 2 inch cut by use of concrete saw or other approved method.

Break out concrete below sawcut by use of jackhammer or approved pneumatic tool.

Vertical face of existing pavement shall be cleaned by compressed air.

All surfaces shall be wetted prior to placing concrete.

Concrete shall be consolidated with internal type vibrator.

Concrete surface shall be cured as soon after the finishing operation as possible. See item 451.10 O.D.O.T.

Item 702.01 — Edges of restoration shall be sealed with asphalt cement.

The seal shall be a uniform 3 inch wide asphalt cement seal.